25

5

CLAIMS:

 Method of embedding a watermark (W) in an information signal (P) comprising the steps of:

determining local weight factors ($\lambda(P)$) for said watermark (W) based on data of said information signal (P), wherein said local weight factors ($\lambda(P)$) are determined such that the embedded watermark is rendered substantially imperceptible, when embedded in said information signal (P),

locally weighting said watermark (W) based on said determined local weight factors (\(\lambda(P)\)), and

embedding said locally weighted watermark in said information signal (P), characterized by determining said local weight factors ($\lambda(P)$) of said watermark (W) based on temporal data of said information signal (P).

- 2. Method according to claim 1, characterized by determining local weight factors ($\lambda(P)$) for said watermark (W) based on spatial data of said information signal (P).
- Method according to claim 1, characterized in that properties of the Human
 Visual System applied to still and/or moving images are taken into account when determining said local weight factors (λ(P)).
- Method according to claim 1, characterized in that said local weight factors
 (\(\chi(P)\)) of said watermark (W) are determined based on motion data of said information signal (P).
 - Method according to claim 1, characterized by detecting scene-changes in the information signal (P), and
 - determining said local weight factors $(\lambda(P))$ based on the detected scene changes.

25

30

5

10

- Method according to any one of claim 1, characterized by performing motion estimation on said information signal (P), and determining said local weight factors (λ(P)) based on the motion estimation.
- Method according to claim 6, characterized in that motion vectors already calculated by an external video compression process are used instead of performing the motion estimation again.
 - An arrangement for embedding a watermark (W) in an information signal (P) comprising:

determining means (16) for determining local weight factors ($\lambda(P)$) for said watermark (W) based on data of said information signal (P), wherein said local weight factors ($\lambda(P)$) of said watermark (W) are determined such that the embedded watermark is rendered substantially imperceptible when embedded in said information signal (P),

weighting means (17) for locally weighting said watermark (W) based on the determined local weight factors (\(\lambda(P)\)), and

embedding means (12) for embedding said locally weighted watermark (W) in said information signal (P),

characterized in that said determining means (16) for determining said local weight factors ($\lambda(P)$) for said watermark (W) are provided for determining said local weight factors ($\lambda(P)$) based on temporal data of said information signal (P).

 An information signal (P) with an embedded watermark (W), wherein said watermark (W) is embedded in said information signal (P),

wherein local weight factors $(\lambda(P))$ for said watermark (W) are determined based on data of said information signal (P), said local weight factors $(\lambda(P))$ being determined such that the embedded watermark is rendered substantially imperceptible when embedded in said information signal (P),

wherein said watermark (W) is locally weighted based on said determined local weight factors ($\lambda(P)$), and

wherein said locally weighted watermark (W) is embedded in said information signal (P),

characterized in that said local weight factors $(\lambda(P))$ of said watermark (W) are determined based on temporal data of said information signal (P).

5

10. A storage medium (50) having stored thereon an information signal (P) with an embedded watermark (W), wherein said watermark (W) is embedded in said information signal (P),

wherein local weight factors $(\lambda(P))$ for said watermark (W) are determined based on data of said information signal (P), said local weight factors $(\lambda(P))$ being determined such that the embedded watermark is rendered substantially imperceptible when embedded in said information signal (P),

wherein said watermark (W) is locally weighted based on said determined 10 local weight factors (λ (P)), and

wherein said locally weighted watermark (W) is embedded in said information signal (P),

characterized in that said local weight factors (\(\lambda(P)\)) of said watermark (W) are determined based on temporal data of said information signal (P).